

California Regional Water Quality Control Board
Santa Ana Region

October 26, 2001

Item: 9

Subject: Update of the Clean Water Act Section 303(d) List of Impaired Waterbodies

INTRODUCTION

Section 303(d) of the Clean Water Act requires states to update the list of surface waterbodies for which water quality standards are not attained, or are not expected to be attained with the implementation of technology-based controls. These waterbodies are considered “impaired”. The resulting 303(d) list of impaired waterbodies includes a description of the pollutants causing impairment and a schedule for developing a Total Maximum Daily Load (TMDL) for each pollutant. The TMDL is the maximum load of a pollutant that can be discharged and still ensure the attainment of applicable water quality standards. Placing a waterbody on the Section 303(d) list of impaired waterbodies requires the development of a TMDL(s) to address the source(s) of impairment. Federal TMDL regulations require states to update the Section 303(d) list of impaired waterbodies and submit the list to US Environmental Protection Agency (USEPA). The Santa Ana Regional Water Quality Control Board, on behalf of the State Water Resources Control Board (State Board), has compiled recommended changes to the 303(d) list. The State Board will review recommendations from all the Regional Boards, hold a public hearing to consider public comments, and adopt a statewide 303(d) list for submittal to the USEPA by April 2002.

The Santa Ana Region last reviewed and updated the 303(d) list in 1998. The proposed revised 303(d) list is shown in Attachment A.

WATERBODIES ASSESSED

To update the 303(d) list, staff solicited information from the public on the water quality condition of waterbodies within the Region and reviewed additional data from recent investigations. The waterbodies assessed thereby included coastal beaches, as well as coastal and inland rivers and streams. These waterbodies are shown in Table 1. The data obtained from the public and additional data reviewed are summarized in Worksheets prepared for each waterbody assessed. These waterbody Worksheets are contained in Attachment B.

Table 1
2001/2002 List of Waterbodies Assessed

<u>Coastal Waterbodies</u>	<u>Inland Valley Waterbodies</u>	<u>Mountain Area Waterbodies</u>
<ul style="list-style-type: none"> ▪ Seal Beach ▪ Anaheim Bay ▪ Huntington Harbour ▪ Newport Bay ▪ San Diego Creek, Reach 1 ▪ San Diego Creek, Reach 2 ▪ Pelican Point Creek ▪ Los Trancos Creek (Crystal Cove Cr.) ▪ Muddy Canyon Creek ▪ Near-shore ocean waters <ul style="list-style-type: none"> ▪ Crystal Cove Beaches ▪ Huntington State/ City Beaches ▪ Bolsa Chica State Beach ▪ Corona State Beach ▪ Newport Beaches ▪ Off-shore ocean waters 	<ul style="list-style-type: none"> ▪ San Timoteo Creek ▪ Cucamonga Creek ▪ Chino Creek ▪ Mill Creek (Prado Area) ▪ Santa Ana River, Reaches 2 & 3 ▪ Temescal Creek ▪ Canyon Lake 	<ul style="list-style-type: none"> ▪ Big Bear Lake ▪ Metcalf Creek ▪ Boulder Creek ▪ Knickerbocker Creek ▪ Grout Creek ▪ San Jacinto River, Reaches 6 & 7 ▪ Strawberry Creek

PROPOSED SECTION 303(d) LIST CHANGES

Listing/Delisting Strategy

State Board guidance to the Regional Boards on listing and delisting pursuant to Section 303(d) has changed over time. In 1998, the Santa Ana Regional Board staff participated on an interagency task force to develop new listing/delisting criteria for use by the State Board and Regional Boards. These criteria generally require more concrete, quantitative information for listing than past criteria (i.e., listing on the basis of “best professional judgment” or “estimated assessments”). The task force discussed but did not reach consensus on the number of samples, or the number of violations of standards, required in order to list a specific waterbody. In general, water bodies may be delisted from the 303(d) list if data demonstrate that the waterbody is not impaired, if there is a TMDL in place, or if there are specific and planned measures to be undertaken that will address the impairment (e.g., a Cleanup and Abatement Order). Specific delisting criteria were included as part of the 1998 Listing Guidance. The State Board has been making plans to revise the 1998 Guidance; however, no updated guidelines are available for use in this update of the 303(d) list.

Given the lack of specific State guidance on revising the 303(d) list, Board staff generally utilized an approach that consisted of evaluating available data and determining if the data were adequate to support a listing decision. Data types evaluated included numeric water column and/or sediment chemistry data, bioassessment data (e.g., benthic infaunal richness and abundance), water column and/or sediment toxicity data. In addition to the numeric data, staff also reviewed other types of information that provide an indication of the status of a waterbody. Examples include a history of algal blooms and/or fish kills, and beach posting information. For this assessment, the majority of the data available were numeric water column chemistry data, numerical data from fish or mussel bioaccumulation studies, and information about beach or river reach closure or postings due to bacterial contamination. Numeric data were compared to an appropriate numeric standard for that waterbody; other information was evaluated to determine if there was clear information demonstrating impairment of a beneficial use. In many cases, the data that were submitted or available were insufficient, or

not conclusive as to whether an impairment exists. In this case, staff recommends implementing a prioritized monitoring program for those waterbodies.

In evaluating waterbodies, staff determined the water quality indicator (parameter or beneficial use) to be evaluated and the minimum required sample size per parameter (*e.g.*, comparison of the bacteriological data to the Basin Plan objective for the protection of swimming requires a minimum of 5 samples for fecal coliform to be taken during a 30-day period). Staff also determined the number of sampling locations for each waterbody and the number of times each location was sampled. Staff believes that, because of the implications of placing a waterbody on the 303(d) list, identifying a waterbody as impaired should not be based on a limited amount of data. Therefore, staff's approach was to define the minimum sample size requirement that would allow an assessment to be completed for a waterbody (including all locations) as 10 data points during the 1997-2001 time period (this requirement was based on USEPA 305(b) guidance, 1998). There was no standard "frequency of exceedance" that staff utilized to make a determination that a waterbody is impaired. For the most part, staff relied on a weight of evidence approach on a waterbody by waterbody basis that took into consideration the number of exceedances of the applicable objectives, the beneficial uses threatened or impaired, the magnitude of the exceedances from the numerical objective, knowledge of the land use history (as it affects water quality) and the quality of the data reviewed. Where the data were adequate to make a determination, staff also attempted to identify seasonal impairment, *e.g.*, whether the impairment occurs primarily during the rainy season. This will help to focus any subsequent TMDL development efforts.

Beach posting data, the only narrative information reviewed, were assessed in a different manner. Staff reviewed this information to determine the number of times a beach was posted by the Orange County Health Care Agency due to bacterial contamination. The Health Care Agency monitors bacterial quality of the beaches pursuant to the California Health and Safety Code, Section 115880 (AB 411 requirements), and posts ocean waters when the bacteriological standards established by the Department of Health Services in the California Code of Regulations (Title 17, Section 7958) are exceeded. The Health Care Agency is required to apply these standards to determine whether it is necessary to restrict the use of public beaches (or portions thereof). Staff believes that posting of the ocean waters indicates at least the threat of impairment to recreation beneficial uses. If a beach was posted for more than one week (seven consecutive days) per year during the assessment period (1997-2001) for reasons other than a spill or illegal dumping, then the beach was included on the proposed list of impaired water bodies. Staff recognized that at times, beaches may have been posted for several days, then reopened for several days and then posted again, etc. Staff determined that this sporadic posting of a beach did not demonstrate a consistent exceedance, and thus the beach is not proposed to be included on the 303(d) list of impaired waterbodies. In addition to the beach posting information, staff also evaluated available bacteriological data for comparison with the California Ocean Plan bacteriological objectives. In most cases, however, the data were collected in a manner that is inconsistent with the Ocean Plan objectives. Therefore, staff only used the bacteriological data to support the beach posting information. Finally, staff also reviewed the environmental group Heal the Bay's Beach Report Card information to support 303(d) listing recommendations. Heal the Bay evaluated the bacteriological data from the Orange County Health Care Agency's monitoring program in comparison to the AB 411 bacteriological thresholds and the Santa Monica Bay Restoration Project's epidemiological study on swimmers at urban-runoff influenced beaches. The grading system of the Report Card takes into consideration the magnitude and frequency of exceedances of the thresholds during both the wet and dry season. Staff used the Report Card to confirm the beach posting information *i.e.*, beaches which have threatened or impacted recreation uses due to bacterial contamination.

As part of the toxic parameter TMDL development process for Newport Bay and its watershed, Regional Board staff reviewed available data and prepared a problem statement (December 2000). The intent was to identify the specific toxic pollutants for which TMDLs are required. (The 303(d) listing for Newport was too general, broadly identifying metals, pesticides, etc., as the causes of impairment.) The specific pollutants identified

included selenium, diazinon and chlorpyrifos. Board staff is developing TMDLs for those constituents now. The USEPA is also in the process of reviewing additional data sets as well as new data not available to Board staff at the time of the problem statement development. A final list of toxic substances requiring TMDLs has not yet been formulated. Once the list is finalized, USEPA will assure that TMDLs are developed for all the listed pollutants and will promulgate all the toxic substance TMDLs, including those for selenium, diazinon and chlorpyrifos, by April 15, 2002. Once the TMDLs are promulgated, the 303(d) list can be modified appropriately, i.e., Newport Bay and its watershed can be removed from the 303(d) list of impaired waters. This revision will be addressed in a future update of the 303(d) list.

To recommend delisting a waterbody from the 303(d) list, staff relied on the 1998 Listing/Delisting Guidance criteria that state that waterbodies may be removed from the 303(d) list if data (10 sample minimum) demonstrate that objectives are being met or if a TMDL has been developed and approved by USEPA.

Table 2 contains the list of waterbodies proposed to be delisted from the 303(d) list with a brief summary of the justification.

Table 3 contains the list of waterbodies proposed to be added to the 303(d) list with a brief summary of the justification.

For each proposed delisted and/or listed waterbody, staff has prepared Waterbody Worksheets that provide the data source, a summary of the data evaluated and justification for the proposed listing/delisting. The Worksheets are included in Attachment B.

Proposed TMDL Priorities

Pursuant to federal regulations (40 CFR 130.7), the Regional Board is required to provide priority rankings for the development of TMDLs for the Region's 303(d) listed waterbodies. To develop TMDL priorities, Board staff considered the 1998 Listing/Delisting Guidance, USEPA's "directive" to complete all TMDLs within the next 13 years (note that there is no specific time frame specified in either the statute or regulation), and the following criteria.

"High" priority waterbodies are targeted for TMDL development in the next 2 to 5 years. Waters are identified as "High" priority for TMDL development when one or more of the following criteria are met:

- there is current involvement in watershed planning activities affecting the waterbody, pursuant to the Watershed Management Initiative adopted by the Regional Board in March, 2001;
- TMDL development activities are currently underway;
- there is litigation that is driving the TMDL development process;
- the waterbody is of significant concern because of its regionally important beneficial uses, including municipal drinking water supply (MUN), habitat for rare or endangered species (RARE) or body contact recreation (REC1), one or more of which may be affected by the pollutant(s) of concern;
- there is a high degree of public concern;
- there is a high potential for beneficial use recovery upon implementation of the TMDL; and
- there is a high potential for state or federal funding or stakeholder funding to support TMDL development.

"Medium" priority waterbodies are targeted for TMDL development in the next 5 to 10 years. Waters are identified as "Medium" priority for TMDL development when one or more of the following criteria are met:

- Board staff is planning to conduct watershed planning activities involving the waterbody in the next 3 to 4 years, pursuant to the Watershed Management Initiative adopted by the Regional Board in March, 2001;
- there is a moderate potential for beneficial use recovery;
- there is a moderate degree of public concern; and
- there is a moderate potential for state or federal funding or stakeholder funding to support TMDL development in the future.

“Low” priority waterbodies are targeted for TMDL development in the next 9-11 years. Data collection efforts to be undertaken in these waterbodies and watersheds may ultimately result in the delisting of many of these waterbodies from the 303(d) list. Therefore, until a more thorough monitoring and assessment program is conducted, staff does not believe effort should be spent developing TMDLs for the “Low” priority waterbodies. Waterbodies are considered to be “Low” priority for TMDL planning because of the following:

- Board staff is not planning to conduct watershed planning activities affecting the waterbody until 7 to 10 years in the future, pursuant to the Watershed Management Initiative adopted by the Regional Board in March, 2001;
- there is minimal public concern;
- there is a low potential for beneficial use recovery upon implementation of the TMDL (the cost of developing TMDL would likely be greater than the expected benefit); and
- there is minimal potential for state or federal funding or stakeholder funding to support TMDL development.

TMDL priorities and schedules for new waterbodies proposed for inclusion on the 303(d) list are shown on Table 3. TMDL priorities and schedules for waterbodies already on the 303(d) list are shown on the proposed 303(d) list in Attachment A.

Priority Monitoring Strategy

In several cases, the data available for review were insufficient, or not conclusive as to whether impairment exists. In these cases, staff recommends implementing a prioritized monitoring program for those waterbodies and the parameters of concern. Two priority lists are proposed. Priority 1 waterbodies are those where the data assessed do not exceed a standard, but are close enough to the standard to be of concern, or where the data assessed occasionally exceed a standard, but there are not enough data points to indicate consistent exceedances. For Priority 1 waterbodies, additional data or information are needed to confirm an impaired water status. Focused monitoring for these waterbodies will take place sooner than for other waterbodies.

Priority 2 waterbodies are those waterbodies where the data assessed do not exceed a standard and are not of concern at this time, or for which less than five data points exist and therefore there are not enough data available to conclude there is impairment or a threat of impairment. Monitoring for these waterbodies and parameters would likely be carried out as part of other agency monitoring programs. Board staff would utilize these data and information to make a determination on the waterbody status in a subsequent 303(d) list update.

Tables 4a and 4b contain the list of Priority 1 and Priority 2 waterbodies, the respective parameters of concern and the proposed monitoring schedule.

Table 2

Waterbodies Proposed to be Delisted from Section 303(d) List of Impaired Waters

Waterbody	Pollutant	Justification
San Diego Creek, Reach 1	Nutrients ¹	TMDL incorporated into the Basin Plan; TMDL approved by USEPA
	Siltation ²	TMDL incorporated into the Basin Plan; TMDL approved by USEPA
San Diego Creek, Reach 2	Nutrients ¹	TMDL incorporated into the Basin Plan; TMDL approved by USEPA
	Siltation ²	TMDL incorporated into the Basin Plan; TMDL approved by USEPA
Upper Newport Bay	Nutrients ¹	TMDL incorporated into the Basin Plan; TMDL approved by USEPA
	Siltation ²	TMDL incorporated into the Basin Plan; TMDL approved by USEPA
	Fecal coliform ³	TMDL incorporated into the Basin Plan; TMDL approved by USEPA
Lower Newport Bay	Nutrients ¹	TMDL incorporated into the Basin Plan; TMDL approved by USEPA
	Siltation ²	TMDL incorporated into the Basin Plan; TMDL approved by USEPA
	Fecal coliform ³	TMDL incorporated into the Basin Plan; TMDL approved by USEPA
Santa Ana River, Reach 3	Total Dissolved Solids ⁴	Data demonstrate objective being met
	Nitrogen ⁵	TMDL incorporated into the Basin Plan; TMDL approved by USEPA Data demonstrate objective being met

¹ Resolution No. 98-100

² Resolution No. 98-101

³ Resolution No. 99-10

⁴ See Attachment B for Worksheet

⁵ Resolution No. 91-125

Table 3
Waterbodies Proposed to be Added to the Section 303(d) List of Impaired Waters

Waterbody	Pollutant	TMDL Priority	TMDL Development	
			Start Date	End Date
San Diego Creek, Reach 1	Fecal coliform	Medium	2010	2015
Pelican Point Creek	Total/Fecal Coliform	Medium	2009	2011
Buck Gully Creek	Total/ Fecal coliform	Medium	2008	2011
Los Trancos Creek (Crystal Cove Cr.)	Total /Fecal coliform	Medium	2008	2011
Muddy Creek	Total/ Fecal coliform	Medium	2008	2011
Seal Beach 1 st Street to Main Street Pier	Bacteria (wet season)*	High	2007	2011
Seal Beach Breakwater	Bacteria (wet season) *	High	2007	2011
Huntington Beach – Dog Beach	Bacteria (wet season) *	High	2007	2011
Huntington State Beach – from Newland Avenue to Santa Ana River	Bacteria (wet and dry seasons) *	High	2005	2009
Newport Beach 19 th Street to 43 rd Street Beach	Bacteria (wet and dry seasons) *	High	2005	2009
Newport Beach 1000 feet down coast of Santa Ana River	Bacteria (wet season) *	High	2007	2011
Little Corona Beach	Bacteria (wet season) *	High	2007	2011
Canyon Lake – East Bay	Sediment	medium	2008	2011

* **Orange County Health Care Agency bases beach postings on the following bacterial indicators: total coliform, fecal coliform and enterococcus. Wet season extends from October to April.**

Table 4a
Monitoring Priority 1 Water Bodies

Waterbody	Parameter of Concern	Monitoring Schedule (year) ¹
Ocean Waters	Dieldrin, mercury, p,pDDE (fish tissue)	2004
Seal Beach	Mercury, p,pDDE(fish tissue)	2004
Huntington Beach State Park	Mercury, p,pDDE (fish tissue)	2004
Anaheim Bay	Mercury, p,pDDE, nickel, copper, dieldrin, PCB	2001 ²
Huntington Harbour	Copper, Nickel, dieldrin, toxaphene	2001 ²
Bolsa Chica	Copper, Nickel	2004
San Jacinto River, Reaches 6 and 7	Hardness, TDS, Chloride, aluminum , sodium	2004
Strawberry Creek	General mineral constituents	2004
Big Bear Lake	Inorganic nitrogen, phosphorus	2002 ³
Knickerbocker Creek	Inorganic nitrogen	2002 ³
Metcalf Creek	Inorganic nitrogen	2002 ³
Boulder Creek	Inorganic nitrogen	2002 ³
Knickerbocker Creek	Inorganic nitrogen	2002 ³

Table 4b
Monitoring Priority 2 Water bodies

Waterbody	Parameter of Concern	Monitoring Schedule (year) ¹
Anaheim Bay	Zinc, Nickel, Lead, Chromium, Cadmium	2001 ²
San Timoteo Creek	General water quality parameters	2006
Temescal Creek	Metals	2007
Cucamonga Creek	Metals	2006
Chino Creek Reach 1	Metals	2006
Mill Creek (Prado area)	Metals	2006
Santa Ana River Reaches 3, 4 and 5	Metals	2006

- 1** monitoring schedule is contingent upon funding availability
- 2** these waterbodies will be assessed as part of the current Anaheim Bay/Huntington Harbour Water Quality Assessment study
- 3** these waterbodies will be assessed as part of the current studies being conducted to develop TMDLs for the Big Bear Lake watershed.

STAFF RECOMMENDATION

Direct staff to transmit this report, comments received and all other relevant materials to the State Water Resources Control in support of the Statewide Section 303(d) list adoption.

ATTACHMENTS

Attachment A: Santa Ana Region 2001/2002 Section 303(d) List

Attachment B: Data Analyses, Summary and Waterbody Worksheets

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
8	B	ANAHEIM BAY	801.110	Metals	Urban Runoff/Storm Sewers Unknown Nonpoint Source	Medium	180	Acres	0108	0111
				Pesticides	Unknown Nonpoint Source	Medium	180	Acres	0108	0111
8	B	HUNTINGTON HARBOUR	801.110	Metals	Urban Runoff/Storm Sewers Boatyards	Medium	150	Acres	0108	0111
				Pathogens	Urban Runoff/Storm Sewers	Medium	150	Acres	0108	0111
				Pesticides	Unknown Nonpoint Source	Medium	150	Acres	0108	0111
8	B	NEWPORT BAY, LOWER	801.110	Metals	Urban Runoff/Storm Sewers Contaminated Sediments Boatyards	High	700	Acres	0196	0107
				Nutrients	Agriculture Urban Runoff/Storm Sewers	High	700	Acres	0196	0198
				Pathogens	Urban Runoff/Storm Sewers	High	700	Acres	0697	0100
				Pesticides	Agriculture Contaminated Sediments	High	700	Acres	0199	0102
				Priority Organics	Contaminated Sediments Unknown Nonpoint Source	High	700	Acres	0199	0102
8	E	UPPER NEWPORT BAY ECOLOGICAL RESERVE	801.110	Metals	Urban Runoff/Storm Sewers	High	752	Acres	0199	0102

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

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				Nutrients		High	752	Acres	0196	0198
					Agriculture Urban Runoff/Storm Sewers Groundwater Loadings					
				Pathogens		High	752	Acres	0697	0100
					Urban Runoff/Storm Sewers					
				Pesticides		High	752	Acres	0199	0102
					Agriculture Unknown Nonpoint Source					
				Sedimentation/Siltation		High	752	Acres	0196	0198
					Agriculture Construction/Land Development Channel Erosion Erosion/Siltation					
8	L	BIG BEAR LAKE	801.710							
				Copper		Medium	2970	Acres	0102	0105
					Resource Extraction					
				Mercury		Medium	2970	Acres	0102	0105
					Resource Extraction					
				Metals		Medium	2970	Acres	0102	0105
					Resource Extraction					
				Noxious aquatic plants		Medium	2970	Acres	0102	0105
					Construction/Land Development Unknown point source					
				Nutrients		Medium	2970	Acres	0102	0105
					Construction/Land Development Snow Skiing Activities					
				Sedimentation/Siltation		Medium	2970	Acres	0102	0105
					Construction/Land Development Snow Skiing Activities Unknown Nonpoint Source					
8	L	CANYON LAKE (RAILROAD CANYON RESERVOIR)	802.120							
				Nutrients		Medium	600	Acres	0102	0104
					Nonpoint Source					

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
				Pathogens		Medium	600	Acres	0102	0104
				Nonpoint Source						
8	L	ELSINORE, LAKE	802.310	Nutrients		Medium	3300	Acres	0102	0104
					Unknown Nonpoint Source					
				Org. enrichment/Low D.O.		Medium	3300	Acres	0102	0104
					Unknown Nonpoint Source					
				Sedimentation/Siltation		Medium	3300	Acres	0102	0104
					Urban Runoff/Storm Sewers					
				Unknown Toxicity		Medium	3300	Acres	0102	0104
					Unknown Nonpoint Source					
8	L	FULMOR, LAKE	802.210	Pathogens		Low	9	Acres	0108	0111
				Unknown Nonpoint Source						
8	L	PRADO PARK LAKE	801.210	Nutrients		Low	60	Acres	0108	0111
					Nonpoint Source					
				Pathogens		Low	60	Acres	0108	0111
				Nonpoint Source						
8	R	CHINO CREEK, REACH 1	801.210	Nutrients		Medium	2	Miles	0100	0105
					Agriculture Dairies					
				Pathogens		Medium	2	Miles	0100	0105
					Dairies					
					Urban Runoff/Storm Sewers					
8	R	CHINO CREEK, REACH 2	801.210	High Coliform Count		Low	10	Miles	0108	0111
				Unknown Nonpoint Source						
8	R	CUCAMONGA CREEK, VALLEY REACH	801.210	High Coliform Count		Low	13	Miles	0108	0111
				Unknown Nonpoint Source						

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
8	R	GROUT CREEK	801.720	Metals	Unknown Nonpoint Source	Medium	2	Miles	0102	0105
				Nutrients		Medium	2	Miles	0102	0105
8	R	KNICKERBOCKER CREEK	801.710	Metals	Unknown Nonpoint Source	Medium	2	Miles	0103	0105
				Pathogens		Medium	2	Miles	0103	0105
8	R	LYTLE CREEK	801.400	Pathogens	Unknown Nonpoint Source	Low	18	Miles	0108	0111
8	R	MILL CREEK (PRADO AREA)	801.250	Nutrients	Agriculture Dairies	Medium	4	Miles	0100	0105
				Pathogens		Medium	4	Miles	0100	0105
				Suspended solids		Medium	4	Miles	0100	0105
8	R	MILL CREEK, REACH 1	801.580	Pathogens	Unknown Nonpoint Source	Low	5	Miles	0108	0111
8	R	MILL CREEK, REACH 2	801.580	Pathogens	Unknown Nonpoint Source	Low	8	Miles	0108	0111
8	R	MOUNTAIN HOME CREEK	801.580	Pathogens	Unknown Nonpoint Source	Low	4	Miles	0108	0111
8	R	MOUNTAIN HOME CREEK, EAST FORK	801.700	Pathogens	Unknown Nonpoint Source	Low	1	Miles	0108	0111

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Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
8	R	RATHBONE (RATHBUN) CREEK	801.720	Nutrients	Snow Skiing Activities Unknown Nonpoint Source	Medium	2	Miles	0102	0105
				Sedimentation/Siltation	Snow Skiing Activities Unknown Nonpoint Source	Medium	2	Miles	0102	0105
8	R	SAN DIEGO CREEK, REACH 1	801.110	Metals	Unknown Nonpoint Source	High	6	Miles	0199	0102
				Nutrients	Agriculture Urban Runoff/Storm Sewers Groundwater Loadings	High	6	Miles	0196	0198
				Pesticides	Unknown Nonpoint Source	High	6	Miles	0199	0102
				Sedimentation/Siltation	Agriculture Construction/Land Development Channel Erosion Erosion/Siltation	High	6	Miles	0196	0198
8	R	SAN DIEGO CREEK, REACH 2	801.110	Metals	Urban Runoff/Storm Sewers	High	6	Miles	0199	0102
				Nutrients	Agriculture Urban Runoff/Storm Sewers Groundwater Loadings	High	6	Miles	0196	0198
				Sedimentation/Siltation	Agriculture Construction/Land Development Channel Erosion Erosion/Siltation	High	6	Miles	0196	0198
				Unknown Toxicity	Unknown Nonpoint Source	High	6	Miles	0199	0102

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REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
8	R	SANTA ANA RIVER, REACH 3	801.200	Nutrients		Medium	3	Miles	0100	0111
				Pathogens	Dairies	Medium	3	Miles	0100	0111
				Salinity/TDS/Chlorides	Dairies	Medium	3	Miles	0100	0111
					Dairies					
8	R	SANTA ANA RIVER, REACH 4	801.270	Pathogens		Low	12	Miles	0108	0111
					Nonpoint Source					
8	R	SANTIAGO CREEK, REACH 4	801.120	Salinity/TDS/Chlorides		Low	2	Miles	0108	0111
					Source Unknown					
8	R	SILVERADO CREEK	801.120	Pathogens		Low	2	Miles	0108	0111
					Unknown Nonpoint Source					
				Salinity/TDS/Chlorides		Low	2	Miles	0108	0111
					Unknown Nonpoint Source					
8	R	SUMMIT CREEK	801.710	Nutrients		Medium	2	Miles	0102	0105
					Construction/Land Development					

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

1998 CALIFORNIA 303(d) LIST AND TMDL PRIORITY SCHEDULE

SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

Approved by USEPA: 12-May-99

REGION	TYPE	NAME	HYDRO UNIT	POLLUTANT/STRESSOR*	SOURCE	PRIORITY	SIZE AFFECTED	UNIT	START DATE	END DATE
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ABBREVIATIONS

REGIONAL WATER QUALITY CONTROL BOARDS

- 1 North Coast
- 2 San Francisco Bay
- 3 Central Coast
- 4 Los Angeles
- 5 Central Valley
- 6 Lahontan
- 7 Colorado River Basin
- 8 Santa Ana
- 9 San Diego

WATER BODY TYPE

- | | | |
|------------------------|-------------------------|-------------------------|
| B = BAYS AND HARBORS | I = LAKES / RESERVOIRS | S = SALINE LAKES |
| C = COASTAL SHORELINES | O = OCEAN AND OPEN BAYS | T = WETLANDS TIDAL |
| E = ESTUARIES | R = RIVERS / STREAMS | W = WETLANDS FRESHWATER |
| G = GROUND WATER | | |

HYDRO UNIT

"Hydro Unit" is the State Water Resources Control Board hydrological subunit area.

START AND END DATES

Start and End Dates are shown as the year or as month/year.

"GROUP A" or "CHEM A" PESTICIDES

aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorocyclohexane (including lindane), endosulfan, and toxaphene

* Comments presented under each pollutant/stressor are not required under Clean Water Act Section 303(d). In a few cases, they provide necessary information.

2001 Water Quality Assessment Worksheets

Coastal Water Bodies

1. Anaheim Bay:

- Beneficial Uses: REC1, REC 2, NAV, BIOL, RARE, WILD, SPWN, MAR
- Hydrologic Unit: 801.11
- Total Water Body Size: 180 acres
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Coastal Fish Contamination Data:*
 - Shiner Surfperch – 1/1 exceeded the MTRL ddepp_w standard of 32.0 ug/kg
 - Yellow Croaker - 1/1 exceeded the MTRL ddepp_w standard of 32.0 ug/kg
 - Yellowfin Croaker – 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
 - Diamond Turbot – 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
 - 2/2 exceeded the “MTRLs in Enclosed Bays and Estuaries” Dieldrin standard of 0.7 ug/kg
 - 2/2 exceeded the “MTRLs in Enclosed Bays and Estuaries” total PCB standard of 5.3 ug/kg
 - Diamond Turbot – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
 - Diamond Turbot – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
 - Black Surfperch - 0/1 exceeded the NAS Hg standard of 0.5 ug/g
 - Black Surfperch – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
 - Yellowfin Croaker – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
 - Yellowfin Croaker – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
 - Diamond Turbot - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - Diamond Turbot – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
 - Black Surfperch - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - Black Surfperch – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g

- Diamond Turbot – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- Black Surfperch – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- Shiner Surfperch – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- Yellow Croaker – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg

Orange County PFRD data:

- 0/1 exceeded the “EBE 4-Day Average” Cd standard of 9.3 ug/L
- 0/1 exceeded the “EBE 4-Day Average” Cr standard of 50 ug/L
- 1/1 exceeded the “EBE 4-Day Average” Cu standard of 3.1 ug/L
- 0/1 exceeded the “EBE 4-Day Average” Pb standard of 8.1 ug/L
- 1/1 exceeded the “EBE 4-Day Average” Ni standard of 8.2 ug/L
- 0/1 exceeded the “EBE 4-Day Average” Zn standard of 81 ug/L

Anaheim Bay / Navy Marsh

- Data Analyses:

Coastal Fish Contamination Data:

- 0/1 exceeded the FDA Hg standard of 1.0 ppm wet weight
- 0/2 exceeded the “MTRLs in Enclosed Bays and Estuaries” Aldrin standard of 0.33 ug/kg
- 0/2 exceeded the “MTRLs in Enclosed Bays and Estuaries” Endosulfan I standard of 64,800 ug/kg
- 0/2 exceeded the “MTRLs in Enclosed Bays and Estuaries” Endosulfan II standard of 64,800 ug/kg
- 0/2 exceeded the “MTRLs in Enclosed Bays and Estuaries” Endosulfan Sulfate standard of 64,800 ug/kg
- 0/2 exceeded the “MTRLs in Enclosed Bays and Estuaries” alpha HCH standard of 1.7 ug/kg
- 0/2 exceeded the “MTRLs in Enclosed Bays and Estuaries” beta HCH standard of 6.0 ug/kg
- 0/2 exceeded the “MTRLs in Enclosed Bays and Estuaries” gamma HCH standard of 8.2 ug/kg
- 0/2 exceeded the “MTRLs in Enclosed Bays and Estuaries” heptachlor standard of 2.3 ug/kg
- 0/2 exceeded the “MTRLs in Enclosed Bays and Estuaries” heptachlor epoxide standard of 1.2 ug/kg
- 0/2 exceeded the “MTRLs in Enclosed Bays and Estuaries” heptachlorobenzene standard of 6.7 ug/kg
- 0/2 exceeded the “MTRLs in Enclosed Bays and Estuaries” toxaphene standard of 9.8 ug/kg

Orange County PFRD data

- 0/2 exceeded the “EBE 4-Day Average” Cd standard of 9.3 ug/L
 - 0/2 exceeded the “EBE 4-Day Average” Cr standard of 50 ug/L
 - 2/2 exceeded the “EBE 4-Day Average” Cu standard of 3.1 ug/L
 - 0/2 exceeded the “EBE 4-Day Average” Pb standard of 8.1 ug/L
 - 2/2 exceeded the “EBE 4-Day Average” Ni standard of 8.2 ug/L
 - 0/2 exceeded the “EBE 4-Day Average” Zn standard of 81 ug/L
- Potential Sources: Unknown at this time
 - Recommendation: More monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results. Water quality assessment study currently underway
 - TMDL Priority: None at this time
 - TMDL Start Date: Not applicable at this time
 - TMDL End Date: Not applicable at this time

2. Buck Gully Creek:

- Beneficial Uses: MUN, REC 1 AND REC 2, WARM
- Hydrologic Unit: 801.11
- Total Water Body Size:
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Orange County Health Care Agency Data:*
 - 230/239 exceeded the 1995 Basin Plan MUN< 100 orgs/100 mL Total Coliform standard
 - 18/56 (30 day periods) exceeded the 1995 Basin Plan REC 2 Fecal Coliform standard
 - 13/56 30 day log means exceeded the 1995 Basin Plan REC 1 standard for Fecal Coliform and 18/56 exceeded but do not have enough samples
- Potential Sources: Unknown at this time, possible urban runoff sources
- Recommendation: Listing on 303(d) list for MUN, REC 1 and REC 2 beneficial uses
- TMDL Priority: Medium
- TMDL Start Date: 2008
- TMDL End Date: 2011

3. Huntington Harbour:

- Beneficial Uses: NAV, REC 1, REC 2, COMM, WILD, RARE, SPWN, MAR
- Hydrologic Unit: 801.11
- Total Water Body Size: 150 acres
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
Orange County PFRD data:
 - 0/4 exceeded the "EBE 4-Day Average" Cd standard of 9.3 ug/L
 - 0/4 exceeded the "EBE 4-Day Average" Cr standard of 50 ug/L
 - 4/4 exceeded the "EBE 4-Day Average" Cu standard of 3.1 ug/L
 - 0/4 exceeded the "EBE 4-Day Average" Pb standard of 8.1 ug/L
 - 3/4 exceeded the "EBE 4-Day Average" Ni standard of 8.2 ug/L
 - 0/4 exceeded the "EBE 4-Day Average" Zn standard of 81 ug/L

Huntington Harbor at Edinger Street

- Data Analyses:
Statewide Mussel Watch data:
 - 2/2 exceeded the "MTRLs in Enclosed Bays and Estuaries" Dieldrin standard of 0.7 ug/kg
 - 2/2 exceeded the "MTRLs in Enclosed Bays and Estuaries" total PCB standard of 5.3 ug/kg
 - 1/2 exceeded the "MTRLs in Enclosed Bays and Estuaries" toxaphene standard of 9.8 ug/kg
 - 0/2 exceeded the FDA Hg standard of 1.0 ppm wet weight
 - 0/2 exceeded the "MTRLs in Enclosed Bays and Estuaries" Aldrin standard of 0.33 ug/kg
 - 0/2 exceeded the "MTRLs in Enclosed Bays and Estuaries" Endosulfan I standard of 64,800 ug/kg
 - 0/2 exceeded the "MTRLs in Enclosed Bays and Estuaries" Endosulfan II standard of 64,800 ug/kg
 - 0/2 exceeded the "MTRLs in Enclosed Bays and Estuaries" Endosulfan Sulfate standard of 64,800 ug/kg
 - 0/2 exceeded the "MTRLs in Enclosed Bays and Estuaries" alpha HCH standard of 1.7 ug/kg
 - 0/2 exceeded the "MTRLs in Enclosed Bays and Estuaries" beta HCH standard of 6.0 ug/kg

- 0/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" gamma HCH standard of 8.2 ug/kg
- 0/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" heptachlor standard of 2.3 ug/kg
- 0/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" heptachlor epoxide standard of 1.2 ug/kg
- 0/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" heptachlorobenzene standard of 6.7 ug/kg

Huntington Harbor at Warner Ave. Bridge

- Data Analyses:

- State Wide Mussel Watch Data*

- 2/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" Dieldrin standard of 0.7 ug/kg
 - 1/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" toxaphene standard of 9.8 ug/kg
 - 2/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" total PCB standard of 5.3 ug/kg
 - 0/2 exceeded the FDA Hg standard of 1.0 ppm wet weight
 - 0/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" Aldrin standard of 0.33 ug/kg
 - 0/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" Endosulfan I standard of 64,800 ug/kg
 - 0/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" Endosulfan II standard of 64,800 ug/kg
 - 0/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" Endosulfan Sulfate standard of 64,800 ug/kg
 - 0/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" alpha HCH standard of 1.7 ug/kg
 - 0/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" beta HCH standard of 6.0 ug/kg
 - 0/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" gamma HCH standard of 8.2 ug/kg
 - 0/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" heptachlor standard of 2.3 ug/kg
 - 0/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" heptachlor epoxide standard of 1.2 ug/kg
 - 0/2 exceeded the "MTRLS in Enclosed Bays and Estuaries" heptachlorobenzene standard of 6.7 ug/kg

Orange County PFRD data:

- 0/2 exceeded the "EBE 4-Day Average" Cd standard of 9.3 ug/L
- 0/2 exceeded the "EBE 4-Day Average" Cr standard of 50 ug/L
- 2/2 exceeded the "EBE 4-Day Average" Cu standard of 3.1 ug/L
- 0/2 exceeded the "EBE 4-Day Average" Pb standard of 8.1 ug/L
- 1/2 exceeded the "EBE 4-Day Average" Ni standard of 8.2 ug/L
- 0/2 exceeded the "EBE 4-Day Average" Zn standard of 81 ug/L

- Potential Sources: Urban runoff
- Recommendation: More monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results. Water Quality Assessment study currently underway.
- TMDL Priority: None at this time
- TMDL Start Date: Not applicable at this time
- TMDL End Date: Not applicable at this time

4. Bolsa Chica:

- Beneficial Uses: REC 1, REC 2, BIOL, WILD, RARE, SPWN, MAR, EST
- Hydrologic Unit: 801.11
- Total Water Body Size: 294 acres
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Orange County PFRD data:*
 - 0/4 exceeded the “EBE 4-Day Average” Cd standard of 9.3 ug/L
 - 0/4 exceeded the “EBE 4-Day Average” Cr standard of 50 ug/L
 - 4/4 exceeded the “EBE 4-Day Average” Cu standard of 3.1 ug/L
 - 0/4 exceeded the “EBE 4-Day Average” Pb standard of 8.1 ug/L
 - 4/4 exceeded the “EBE 4-Day Average” Ni standard of 8.2 ug/L
 - 0/4 exceeded the “EBE 4-Day Average” Zn standard of 81 ug/L
 - Bolsa Chica State Beach Life Guard Station # 18 posted 0 times in 3 years
 - Bolsa Chica State Beach Life Guard Station # 23 posted 1 time in 3 years during dry season
 - Bolsa Chica State Beach Reserve posted 0 times in 3 years
 - Bolsa Chica State Beach Warner Avenue posted 0 times in 3 years
- Potential Sources: urban runoff
- Recommendation: More monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
- TMDL Priority: None at this time
- TMDL Start Date: Not applicable at this time
- TMDL Start Date: Not applicable at this time

5. Newport Bay:

- Beneficial Uses: NAV, REC 1, REC 2, COMM, WILD, RARE, SPWN, MAR, SHEL
- Hydrologic Unit: 801.11
- Total Water Body Size: 752 acres and 700 acres (1452 acres overall)
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time

Overall Bay

- Data Analyses:

Coastal Fish Contamination Data:

- Shiner Surfperch – 1/2 exceeded the MTRL Hg standard of 0.00037 ug/g
- Yellowfin Croaker – 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
- Yellowfin Croaker – 1/1 exceeded the MTRL ddepp_w standard of 32.0 ug/kg
- Shiner Surfperch– 2/2 exceeded the MTRL ddepp_w standard of 32.0 ug/kg
- Spotted Turbot – 1/1 exceeded the MTRL ddepp_w standard of 32.0 ug/kg
- Diamond Turbot – 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- Diamond Turbot - 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
- Shiner Surfperch – 0/2 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- Shiner Surfperch – 0/2 exceeded the NAS Endosulfan standard of 0.1 ug/g
- Spotted Turbot – 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- Spotted Turbot – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
- Yellowfin Croaker – 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- Yellowfin Croaker – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g

Newport Bay Above PCH Bridge

- Data Analyses:

Coastal Fish Contamination Data:

- Diamond Turbot – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- Shiner Surfperch – 2/2 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- Spotted Turbot – 1/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- Yellowfin Croaker – 1/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- Diamond Turbot – 0/1 exceeded the MTRL Hg standard of 0.00037 ug/g
- Diamond Turbot – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
- Diamond Turbot – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
- Shiner Surfperch – 1/2 exceeded the MTRL Hg standard of 0.00037 ug/g
- Shiner Surfperch – 0/2 exceeded the NAS Hg standard of 0.5 ug/g
- Shiner Surfperch – 0/2 exceeded the FDA Hg standard of 1.0 ug/g
- Spotted Turbot – 0/1 exceeded the MTRL Hg standard of 0.00037 ug/g
- Spotted Turbot – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
- Spotted Turbot – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
- Yellowfin Croaker – 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
- Yellowfin Croaker – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
- Yellowfin Croaker – 0/1 exceeded the FDA Hg standard of 1.0 ug/g

Newport Pier

- Data Analyses:

- Spotted Turbot – 1/1 exceeded the MRTL Hg standard of 0.00037 ug/g
- Spotted Turbot – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
- Spotted Turbot – 0/1 exceeded the FDA Hg standard of 1 ug/g
- Barred Surfperch – 2/2 exceeded the MRTL Hg standard of 0.00037 ug/g
- Barred Surfperch – 0/2 exceeded the NAS Hg standard of 0.5 ug/g
- Barred Surfperch – 0/2 exceeded the FDA Hg standard of 1 ug/g

- California Corbina – 1/1 exceeded the MRTL Hg standard of 0.00037 ug/g
- California Corbina – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
- California Corbina – 0/1 exceeded the FDA Hg standard of 1 ug/g
- Yellowfin Croaker – 1/1 exceeded the MRTL Hg standard of 0.00037 ug/g
- Yellowfin Croaker – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
- Yellowfin Croaker – 0/1 exceeded the FDA Hg standard of 1 ug/g
- White Croaker – 1/1 exceeded the MRTL Hg standard of 0.00037 ug/g
- White Croaker – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
- White Croaker – 0/1 exceeded the FDA Hg standard of 1 ug/g
- Spotted Turbot - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- Spotted Turbot – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
- Barred Surfperch - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- Barred Surfperch – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
- California Cobrina - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- California Cobrina – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
- Yellowfin Croaker - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- Yellowfin Croaker – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
- Spotted Turbot – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- California Corbina – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- Yellowfin Croaker – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- Barred Surfperch – 1/2 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- White Croaker – 1/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg

Newport Beach Pier

- Data Analyses:

Coastal Fish Contamination Data:

- Barred Surfperch – 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- Barred Surfperch – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
- White Croaker - – 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- White Croaker – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g

Newport Jetty

- Data Analyses:

Coastal Fish Contamination Data:

- Spotted Scorpionfish – 1/1 exceeded the MRTL Hg standard of 0.00037 ug/g
- Spotted Scorpionfish – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
- Spotted Scorpionfish – 0/1 exceeded the FDA Hg standard of 1 ug/g
- Spotted Turbot – 2/2 exceeded the MRTL Hg standard of 0.00037 ug/g
- Spotted Turbot – 0/2 exceeded the NAS Hg standard of 0.5 ug/g
- Spotted Turbot – 0/2 exceeded the FDA Hg standard of 1 ug/g
- Spotted Scorpionfish – 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- Spotted Scorpionfish – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
- Spotted Turbot – 0/2 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- Spotted Turbot – 0/2 exceeded the NAS Endosulfan standard of 0.1 ug/g
- Black Surfperch – 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- Black Surfperch - 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
- Shiner Surfperch – 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- Shiner Surfperch - 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
- Spotted Scorpionfish – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg

- Spotted Turbot – 0/2 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- Black Surfperch – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- Shiner Surfperch – 1/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- Black Surfperch – 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
- Black Surfperch – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
- Black Surfperch – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
- Shiner Surfperch – 0/1 exceeded the MTRL Hg standard of 0.00037 ug/g
- Shiner Surfperch – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
- Shiner Surfperch – 0/1 exceeded the FDA Hg standard of 1.0 ug/g

Balboa Pier

- Data Analyses:

Coastal Fish Contamination Data:

- Walleye Surfperch – 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
- Walleye Surfperch – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
- Walleye Surfperch – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
- Diamond Turbot – 2/2 exceeded the MTRL Hg standard of 0.00037 ug/g
- Diamond Turbot – 0/2 exceeded the NAS Hg standard of 0.5 ug/g
- Diamond Turbot – 0/2 exceeded the FDA Hg standard of 1.0 ug/g
- Barred Surfperch – 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
- Barred Surfperch – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
- Barred Surfperch – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
- Walleye Surfperch - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- Walleye Surfperch – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
- Diamond Turbot - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
- Diamond Turbot – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g

- Barred Surfperch - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - Barred Surfperch – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
 - Diamond Turbot – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
 - Walleye Surfperch – 1/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
 - Diamond Turbot – 0/2 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
 - Barred Surfperch – 1/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- Potential Sources: Unknown at this time
 - Recommendation: More monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
 - TMDL Priority: none at this time
 - TMDL Start Date: not applicable at this time
 - TMDL End Date: not applicable at this time

6. Pelican Point Creek

- Beneficial Uses: MUN, REC 1 AND REC 2, WARM
- Hydrologic Unit: 801.11
- Total Water Body Size:
- Size Impaired: entire creek
- Extent of Impairment: Unknown at this time
- Data Analyses:

Mouth of Creek

- Data Analyses:
Orange County Health Care Agency data:
 - 225/230 exceeded the 1995 Basin Plan MUN< 100 orgs/100 mL Total Coliform standard
 - 31/55 (30 day periods) exceeded the 1995 Basin Plan REC 2 Fecal Coliform standard
 - 1/56 30 day log means exceeded the 1995 Basin Plan REC 1 standard for Fecal Coliform and 48/56 exceeded but do not have enough samples

Pelican Point Middle Creek

- Data Analyses:
Orange County Health Care Agency data:
 - 126/133 exceeded the 1995 Basin Plan MUN< 100 orgs/100 mL Total Coliform standard
 - 12/50 30 day log means exceeded the 1995 Basin Plan REC 1 standard for Fecal coliform and 12/50 exceeded but do not have enough samples
 - 11/50 30 day periods exceeded the 1995 Basin Plan REC 2 standard for Fecal coliform

Pelican Hill Waterfall

- Data Analyses:
Orange County Health Care Agency data:
 - 14/64 (30 day periods) exceeded the 1995 Basin Plan REC 2 Fecal Coliform standard
 - 208/220 exceeded the 1995 Basin Plan MUN< 100 orgs/100 mL Total Coliform standard
 - 11/56 30 day log means exceeded the 1995 Basin Plan REC 1 standard for Fecal Coliform and 17/56 exceeded but do not have enough samples

- Pelican Point Beach posted 0 times in 3 years and Heal the Bay grade is A for dry season and B during wet season.
- Potential Sources: unknown at this time. Possible urban runoff
- Recommendation: List creek only on the 303 (d) List of impaired water bodies due to REC 1, REC 2, and MUN beneficial use impairments
- TMDL Priority: Medium
- TMDL Start Date: 2008
- TMDL End Date: 2011

7. Los Trancos Creek (Crystal Cove Creek)

- Beneficial Uses: MUN REC 1 AND REC 2, WARM
- Hydrologic Unit: 801.11
- Total Water Body Size:
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Dr. Ford's data from Irvine Company sampling data:*
 - LTU upstream - 0/1 (one sample available per 30 day period) exceeded the 1995 Basin Plan REC 1 Fecal Coliform standard
 - LT bridge - 1/1 (one sample available per 30 day period) exceeded the 1995 Basin Plan REC 1 Fecal Coliform standard
 - LTU upstream - 7/7 exceeded the 1995 Basin Plan MUN< 100 orgs/100 mL Total Coliform standard
 - LT bridge - 7/7 exceeded the 1995 Basin Plan MUN< 100 orgs/100 mL Total Coliform standard
 - LT1 mouth - 3/6 exceeded the 1995 Basin Plan MUN< 100 orgs/100 mL Total Coliform standard
 - LTU upstream - 0/4 (30 day periods) exceeded the 1995 Basin Plan REC 2 Fecal Coliform standard
 - LT bridge - 1/4 (30 day periods) exceeded the 1995 Basin Plan REC 2 Fecal Coliform standard
 - LT1 mouth - [not enough sample available]
 - LT1 mouth - 0/4 (30 day periods) exceeded the 1995 Basin Plan REC 2 avg <2000 orgs/mL and 10% sample < 4000 orgs/mL Fecal Coliform standard
 - Orange County Health Care Agency data:*
 - 264/269 exceeded the 1995 Basin Plan MUN< 100 orgs/100 mL Total Coliform standard
 - CC upstream - 114/117 exceeded the 1995 Basin Plan MUN<100 orgs/100 mL Total Coliform standard
 - 22/56 (30 day periods) exceeded the 1995 Basin Plan REC 2 Fecal Coliform standard
 - CC upstream - 25/36 (30 day periods) exceeded the 1995 Basin Plan REC 2 Fecal Coliform standard
 - CC upstream - 16/36 30 day log means exceeded the 1995 Basin Plan REC 1 standard for Fecal Coliform and 13/36 exceeded but do not have enough samples

- 24/56 30 day log means exceeded the 1995 Basin Plan REC 1 standard for Fecal Coliform and 22/56 exceeded but do not have enough samples
 - Crystal Cove Los Trancos Beach posted 0 times in 3 years. HeLa the Bay grade is A in dry season and A in wet season.
 - Crystal Cove State Park Treasure Cove posted 0 times in 3 years. Heal the Bay grade is A in wet season and A in dry season.
- Potential Sources: all sources unknown, possible urban runoff
 - Recommendation: List on the 303(d) list for impairment of REC 1, REC 2, and MUN beneficial uses
 - TMDL Priority: Medium
 - TMDL Start Date: 2008
 - TMDL End Date: 2011

8. Muddy Creek:

- Beneficial Uses: MUN, REC 1 AND REC 2, WARM
- Hydrologic Unit: 801.11
- Total Water Body Size:
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Dr Ford's Irvine Company monitoring data:*
 - MC1 – [not enough sample available]
 - MC1 mouth – 2/4 exceeded the 1995 Basin Plan MUN< 100 orgs/100 mL Total Coliform standard
 - MC1 mouth – 0/4 (30 day periods) exceeded the 1995 Basin Plan REC 2 avg <2000 orgs/mL and 10% sample < 4000 orgs/mL Fecal Coliform standard
 - 75/108 exceeded the 1995 Basin Plan MUN< 100 orgs/100 mL Total Coliform standard
 - 16/53 (30 day periods) exceeded the 1995 Basin Plan REC 2 Fecal Coliform standard
 - 11/54 30 day log means exceeded the 1995 Basin Plan REC 1 standard for Fecal Coliform and 18/54 exceeded but do not have enough samples
 - Crystal Cove Muddy Creek Beach
- Potential Sources: all sources unknown
- Recommendation: List on 303(d) list for impairment of REC 1, 2 and MUN beneficial uses
- TMDL Priority: medium
- TMDL Start Date: 2008
- TMDL End Date: 2011

9. Huntington Beach State Park:

- Beneficial Uses: REC 1 AND REC 2, MAR
- Hydrologic Unit: 801.11
- Total Water Body Size: 3 miles
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Coastal Fish Contamination Data:*
 - Shiner Surfperch – 1/1 exceeded the MTRL ddepp_w standard of 32 ug/kg
 - Barred Surfperch – 0/1 exceeded the MTRL endosulfan standard of 64.8 mg/kg
 - Barred Surfperch – 0/1 exceeded the NAS endosulfan standard of 0.1 ug/g
 - Shiner Surfperch – 0/1 exceeded the MTRL endosulfan standard of 64.8 mg/kg
 - Shiner Surfperch – 0/1 exceeded the NAS endosulfan standard of 0.1 ug/g
 - Barred Surfperch – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg

Huntington Beach Pier

- Data Analyses:
 - Coastal Fish Contamination Data:*
 - Yellowfin Croaker – 1/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
 - Yellowfin Croaker (pier)- 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
 - Yellowfin Croaker (pier) – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
 - Yellowfin Croaker (pier) – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
 - Barred Surfperch (pier) – 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
 - Barred Surfperch (pier) – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
 - Barred Surfperch (pier) – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
 - Shiner Surfperch (pier) -1/1 exceeded the MTRL Hg standard of 0.00037 ug/g

- Shiner Surfperch (pier) – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
- Shiner Surfperch (pier) – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
- Yellowfin Croaker (pier) – 0/1 exceeded the MTRL endosulfan standard of 64.8 mg/kg
- Yellowfin Croaker (pier) – 0/1 exceeded the NAS endosulfan standard of 0.1 ug/g

Huntington City Beach

- Orange County Health Care Agency:
 - Dog Beach posted 1 time in 3 years during wet season- Heal the Bay Report Card grade unavailable these segment of the beach.
 - Bluffs posted 0 times in 3 years – Heal the Bay Report Card grade is A for dry and D for wet seasons.
 - 17th Street Beach posted 0 times in 3 years – Heal the Bay Report Card grade is A for dry and F for wet seasons.
 - Jack's Snackbar Beach posted 0 times in 3 years – Heal the Bay Report Card grade is A for dry and D for wet seasons.
 - Guardlife station #9, 6, 1, 11, 15, and 24 posted 0 times in 3 years – Heal the Bay Report Card grade unavailable for these segments of the beach.
 - 150 feet up and down coast of of Huntington Street posted 0 times in 3 years. Heal the Bay Report Card grade is unavailable for this segment of the beach.
 - 500 feet up and down coast of Hunt Street posted 0 times in 3 years. Heal the Bay Report Card grade unavailable for this segment of the beach.
- Potential Sources: Unknown at this time
- Recommendation:
 - List Dog Beach, Huntington State Beach (from Newland Ave to Santa Ana River) on 303(d) list for impairment of REC 1, 2 beneficial uses due to bacterial contamination
 - Overall, more fish tissue monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
- TMDL Priority: High
- TMDL Start Date: 2007
- TMDL End Date: 2011

10. Newport Bay Beaches:

- Beneficial Uses: REC 1 AND REC 2, MAR
- Hydrologic Unit: 801.11
- Total Water Body Size:
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - *Coastal Fish Contamination Data:*
 - Walleye Surfperch 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
 - Barred Surfperch – 2/2 exceeded the MTRL Hg standard of 0.00037 ug/g
 - California Corbina – 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
 - California Corbina – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
 - California Corbina – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
 - White Croaker – 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
 - Walleye Surfperch – 1/1 exceeded the MTRL Ocean Waters diel_w standard of 0.2 ug/kg
 - Walleye Surfperch – 1/1 exceeded the MTRL Bays and Estuaries diel_w standard of 0.7 ug/kg
 - Walleye Surfperch – 0/1 exceeded the NAS diel_w standard of 0.1 ug/g
 - Walleye Surfperch – 0/1 exceeded the FDA diel_w standard of 0.3 ug/g
 - Walleye Surfperch – 1/1 exceeded the ddepp_w standard of 32.0 ug/kg
 - Barred Surfperch – 1/2 exceeded the MTRL ddepp_w standard of 32.0 ug/kg
 - Shiner Surfperch – 1/1 exceeded the MTRL ddepp_w standard of 32.0 ug/kg
 - White Croaker - 1/1 exceeded the MTRL ddepp_w standard of 32.0 ug/kg
 - Walleye Surfperch – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
 - Walleye Surfperch – 0/1 exceeded the FDA Hg standard of 1.0 ug/g

- Barred Surfperch – 0/2 exceeded the NAS Hg standard of 0.5 ug/g
 - Barred Surfperch – 0/2 exceeded the FDA Hg standard of 1.0 ug/g
 - Shiner Surfperch – 0/1 exceeded the MTRL Hg standard of 0.00037 ug/g
 - Shiner Surfperch – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
 - Shiner Surfperch – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
 - White Croaker – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
 - White Croaker - 0/1 exceeded the FDA Hg standard of 1.0 ug/g
 - Walleye Surfperch - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - Walleye Surfperch – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
 - Barred Surfperch - 0/2 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - Barred Surfperch – 0/2 exceeded the NAS Endosulfan standard of 0.1 ug/g
 - California Cobrina - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - California Cobrina – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
 - Shiner Surfperch - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - Shiner Surfperch – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
 - White Croaker - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - White Croaker – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
 - California Corbina – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- *Orange County Health Care Agency data:*
 - Newport Beach 38th Street Beach posted 5 times in 3 years during the wet and dry season. Heal the Bay grade is D for dry season and F for wet season.
 - Newport Beach 43rd Street Beach posted 1 time in 3 years during the dry season and Heal the Bay grade is F during the dry and F during the wet season.
 - Newport Beach 52-53rd Street Beach posted 0 times in 3 years. Heal the Bay Grade not available.

- Newport Beach 19th Street Beach posted 2 times in 3 years during the dry and wet seasons. Heal the Bay grade is A during the dry and F during the wet season.
 - Newport Beach 1000 feet down coast of Santa Ana River posted 1 time in 3 years during the wet season.
 - Newport Beach 300 feet down coast of Santa Ana River posted 0 times in 3 years.
 - Newport Beach 10th Street Beach posted 0 times in 3 years and Heal the Bay grade is A in dry season and F in the wet season.
 - Newport Beach 15th Street Beach posted 0 times in 3 years. Heal the Bay grade is A in the dry season and F in the wet season.
 - Corona del Mar Beach posted 0 times in 3 years. Heal the Bay grade is A in the dry season and F in the wet season.
 - Little Corona Beach posted 1 time in 3 years. Heal the Bay grade is B for the dry season and F in the wet season.
- Potential Sources: Unknown at this time
 - Recommendation:
 - List Little Corona Beach, Newport Beach from 19th Street to 43rd Street and 1000 feet down coast from Santa Ana River on 303(d) list for impairment of REC 1, 2 beneficial uses due to bacterial contamination
 - Overall, more fish tissue monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
 - TMDL Priority: High
 - TMDL Start Date: 2005
 - TMDL End Date: 2009

11. Ocean Waters

- Beneficial Uses: REC 1, REC 2, NAV, MAR, COMM, WILD, RARE, SPWN, SHEL
- Hydrologic Unit: 801.11
- Total Water Body Size:
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time

Emma Oil Platform

- *Coastal Fish Contamination Data:*
- Data Analyses:
 - Black Surfperch – 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
 - Black Surfperch – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
 - Black Surfperch – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
 - Kelp Bass - 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
 - Kelp Bass – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
 - Kelp Bass - 0/1 exceeded the FDA Hg standard of 1.0 ug/g
 - Opaleye – 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
 - Opaleye – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
 - Opaleye - 0/1 exceeded the FDA Hg standard of 1.0 ug/g
 - Black Surfperch – 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - Black Surfperch – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
 - Kelp Bass - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - Kelp Bass – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
 - Opaleye - 0/1 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - Opaleye – 0/1 exceeded the NAS Endosulfan standard of 0.1 ug/g
 - Black Surfperch – 0/2 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
 - Kelp Bass - exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg

Esther Oil Platform

- *Coastal Fish Contamination Data:*
- Data Analyses:
 - Kelp Bass – 1/1 exceeded the MTRLs in Ocean Waters diel_w standard of 0.2 ug/kg
 - Kelp Bass – 1/1 exceeded the MTRLs in Bays and Estuaries diel_w standard of 0.7 ug/kg
 - Kelp Bass – 0/1 exceeded the NAS diel_w standard of 0.1 ug/g
 - Kelp Bass – 0/1 exceeded the FDA diel_w standard of 0.3 ug/g
 - Black Surfperch – 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
 - Black Surfperch – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
 - Black Surfperch – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
 - Kelp Bass – 1/1 exceeded the MTRL Hg standard of 0.00037 ug/g
 - Kelp Bass – 0/1 exceeded the NAS Hg standard of 0.5 ug/g
 - Kelp Bass – 0/1 exceeded the FDA Hg standard of 1.0 ug/g
 - Black Surfperch – 1/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
 - Kelp Bass – 1/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
- Potential Sources: Unknown at this time
- Recommendation: More monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
- TMDL Priority: None at this time
- TMDL Start Date: Not applicable at this time
- TMDL End Date: Not applicable at this time

12. San Diego Creek

- Beneficial Uses: REC 1 and REC 2
- Hydrologic Unit: 801.11
- Total Water Body Size:
- Size Impaired: All of reach 1
- Extent of Impairment: Unknown at this time
- Data Analyses: TMDL report for Newport Bay indicates that 22 times /22 weeks of sampling, the creek exceeded the total and fecal coliform standards for rec 1 and rec 2.
- Potential Sources: All sources unknown. Potential urban run-off source.
- Recommendation: List Reach 1 on 303 d list for impairment of Rec 1 and Rec 2 beneficial uses
- TMDL Priority: High
- TMDL Start Date: 2010
- TMDL End Date: 2015

13. Seal Beach:

- Beneficial Uses: REC 1 and REC 2
- Hydrologic Unit: 801.11
- Total Water Body Size: 1 mile
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Coastal Fish Contamination Data:*
 - White Croaker – 0/3 exceeded the NAS Endosulfan standard of 0.1 ug/g
 - White Croaker – 0/3 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - Yellowfin Croaker – 0/2 exceeded the NAS Endosulfan standard of 0.1 ug/g
 - Yellowfin Croaker – 0/2 exceeded the MTRL Endosulfan standard of 64.8 mg/kg
 - White Croaker – 1/3 exceeded the “MTRLs for Carcinogens in Ocean Waters” Hg standard of 0.00037 ug/g
 - White Croaker – 0/3 exceeded the NAS Hg standard of 0.5 ug/g
 - White Croaker – 0/3 exceeded the FDA Hg standard of 1.0 ug/g
 - Yellowfin Croaker – 2/2 exceeded the MTRL’s Hg standard of 0.00037 ug/g
 - Yellowfin Croaker – 0/2 exceeded the NAS Hg standard of 0.5 ug/g
 - Yellowfin Croaker – 0/2 exceeded the FDA Hg standard of 1.0 ug/g
 - White Croaker – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
 - Yellowfin Croaker – 0/2 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
 - White Croaker-off – 0/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
 - White Croaker-on – 1/1 exceeded the “MTRLs in Enclosed Bays” ddepp_w standard of 32.0 ug/kg
 - Orange County Health Care Agency Data:*
 - 1st Street Beach posted 1 time in 3 years during the wet season. Heal the Bay grade is B during the dry season and F during the wet season.

- 8th Street Beach posted 1 time in 3 years during the wet season. Heal the Bay grade is B during the dry season and F during the wet season.
 - 14th Street Beach posted 0 times in 3 years. Heal the Bay grade is A during the dry season and C during the wet season.
 - State Beach posted 0 times in 3 years. Heal the Bay grade unavailable.
 - Breakwater posted 2 times in 3 years during the wet season. Heal the Bay grade not available.
- Potential Sources: Unknown at this time
 - Recommendation:
 - List Seal Beach from 1st Street to Main Street and the breakwater point on 303(d) list for impairment of REC 1, 2 and MUN beneficial uses due to bacterial contamination
 - More fish tissue monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
 - TMDL Priority: High
 - TMDL Start Date: 2007
 - TMDL End Date: 2011

Inland Water Bodies

1. Temescal Creek:

- Beneficial Uses: AGR, IND, GWR, REC1, REC2, WARM, WILD, RARE, SPWN, LWRM
- Hydrologic Unit: 801.25
- Total Water Body Size:
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Orange County Water District Data*
 - 0/1 exceeded the CTR “max. conc. 1-hr avg” arsenic standard of 150 ug/L (based on hardness = 285 mg/L)
 - 0/1 exceeded the CTR “max. conc. 1-hr avg” cadmium standard of 13 ug/L (based on hardness = 285 mg/L)
 - 0/1 exceeded the CTR “max. conc. 1-hr avg” copper standard of 36 ug/L (based on hardness = 285 mg/L)
 - 0/1 exceeded the CTR “max. conc. 1-hr avg” lead standard of 190 ug/L (based on hardness = 285 mg/L)
 - 0/1 exceeded the CTR “max. conc. 1-hr avg” nickel standard of 1100 ug/L (based on hardness = 285 mg/L)
 - 0/1 exceeded the CTR “max. conc. 1-hr avg” zinc standard of 280 ug/L (based on hardness = 285 mg/L)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” cadmium standard of 8.5 ug/L (Based on hardness = 194)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” cadmium standard of 13 ug/L (Based on hardness = 284)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” cadmium standard of 11 ug/L (Based on hardness = 238)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” copper standard of 25 ug/L (Based on hardness = 194)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” copper standard of 36 ug/L (Based on hardness = 284)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” copper standard of 31 ug/L (Based on hardness = 238)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” nickel standard of 810 ug/L (Based on hardness = 194)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” nickel standard of 1100 ug/L (Based on hardness = 284)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” nickel standard of 980 ug/L (Based on hardness = 238)

- Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” lead standard of 130 ug/L (Based on hardness = 194)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” lead standard of 190 ug/L (Based on hardness = 284)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” lead standard of 170 ug/L (Based on hardness = 238)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” selenium standard of 20 ug/L (Based on hardness = 194)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” selenium standard of 20 ug/L (Based on hardness = 284)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” selenium standard of 20 ug/L (Based on hardness = 238)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” zinc standard of 200 ug/L (Based on hardness = 194)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” zinc standard of 280 ug/L (Based on hardness = 284)
 - Reach 1A – 0/1 exceeded the “Cal Toxics Rule Max Conc 1 hr Avg” zinc standard of 250 ug/L (Based on hardness = 238)
- Potential Sources: Unknown at this time
 - Recommendation: More monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
 - TMDL Priority: None at this time
 - TMDL Start Date: Not applicable at this time
 - TMDL End Date: Not applicable at this time

2. San Timoteo Creek:

- Beneficial Uses: GWR, REC1, REC2, WARM, WILD
- Hydrologic Unit: 801.60
- Total Water Body Size:
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses: no ambient water quality data submitted
- Potential Sources: Unknown at this time
- Recommendation: More monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
- TMDL Priority: None at this time
- TMDL Start Date: Not applicable at this time
- TMDL End Date: Not applicable at this time

3. Cucamonga Creek:

- Beneficial Uses: MUN, IND, PROC, GWR, POW, REC1, REC2, LWRM, COLD, WILD, SPWN
- Hydrologic Unit: 801.24
- Total Water Body Size: 13 miles
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Orange County Water District Data:*
 - 0/1 (1/year) - exceeded the "CTR for Inorganic Freshwater Aquatic Life Protection" Cd standard of 5.7 ug/L
 - 0/1 (1/year) - exceeded the "CTR for Inorganic Freshwater Aquatic Life Protection" Cu standard of 17.0 ug/L
 - 0/1 (1/year) - exceeded the "CTR for Inorganic Freshwater Aquatic Life Protection" Pb standard of 86.0 ug/L
 - 0/1 (1/year) - exceeded the "CTR for Inorganic Freshwater Aquatic Life Protection" Ni standard of 580 ug/L
 - 0/1 (1/year) - exceeded the "CTR for Inorganic Freshwater Aquatic Life Protection" Se standard of 20 ug/L
 - 0/1 (1/year) - exceeded the "CTR for Inorganic Freshwater Aquatic Life Protection" Zn standard of 150 ug/L
- Potential Sources: Unknown at this time
- Recommendation: More monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
- TMDL Priority: None at this time
- TMDL Start Date: Not applicable at this time
- TMDL End Date: Not applicable at this time

4. Chino Creek:

- Beneficial Uses: REC1, REC2, WARM, LWRM, WILD, RARE
- Hydrologic Unit: 801.21
- Total Water Body Size: 2 miles
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Orange County Water District Data:*
 - Reach 1 – 0/1 exceeded the “Avg CTR Contin. Conc. (4-day avg)” Arsenic standard of 150 ug/L
 - Reach 1 – 0/1 exceeded the “Avg CTR Contin. Conc. (4-day avg)” Cadmium standard of 2.4 ug/L
 - Reach 1 – 0/1 exceeded the “Avg CTR Contin. Conc. (4-day avg)” Lead standard of 2.8 ug/L
 - Reach 1 – 0/1 exceeded the “Avg CTR Contin. Conc. (4-day avg)” Copper standard of 9.7 ug/L
 - Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg nickel standard of 430 ug/L (Based on hardness = 92.6)
 - Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg nickel standard of 950 ug/L (Based on hardness = 235)
 - Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg nickel standard of 950 ug/L (Based on hardness = 234)
 - Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg nickel standard of 910 ug/L (Based on hardness = 220)
 - Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg nickel standard of 510 ug/L (Based on hardness = 113)
 - Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg cadmium standard of 3.8 ug/L (Based on hardness = 92.6)
 - Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg cadmium standard of 11 ug/L (Based on hardness = 235)
 - Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg cadmium standard of 11 ug/L (Based on hardness = 234)

- Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg cadmium standard of 10 ug/L (Based on hardness = 220)
- Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg cadmium standard of 4.7 ug/L (Based on hardness = 113)
- Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg lead standard of 58 ug/L (Based on hardness = 92.6)
- Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg lead standard of 160 ug/L (Based on hardness = 235)
- Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg lead standard of 160 ug/L (Based on hardness = 234)
- Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg lead standard of 150 ug/L (Based on hardness = 220)
- Reach 1 – 0/1 exceeded the Cal EPA Tox Rule Criteria Max. Conc. 1 hr Avg lead standard of 72 ug/L (Based on hardness = 113)
- Potential Sources: Unknown at this time
- Recommendation: More monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
- TMDL Priority: None at this time
- TMDL Start Date: Not applicable at this time
- TMDL End Date: Not applicable at this time

5. Mill Creek (Prado Area):

- Beneficial Uses: REC1, REC2, WARM, WILD, RARE
- Hydrologic Unit: 801.58
- Total Water Body Size: 4 miles
- Size Impaired:
- Extent of Impairment:
- Data Analyses:
 - Orange County Water District Data:*
 - 0/8 exceeded the “August CTR Continuous Cocn. 4 Day Avg” antimony standard of 14 ug/L
 - 0/8 exceeded the “August CTR Continuous Cocn. 4 Day Avg” copper standard of 13000 ug/L
 - 0/8 exceeded the “August CTR Continuous Cocn. 4 Day Avg” mercury standard of 0.05 ug/L
 - 0/8 exceeded the “August CTR Continuous Cocn. 4 Day Avg” nickel standard of 610 ug/L
- Potential Sources: Unknown at this time
- Recommendation: More monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
- TMDL Priority: None at this time
- TMDL Start Date: Not applicable at this time
- TMDL End Date: Not applicable at this time

6. Santa Ana River, Reaches 2 & 3:

- Beneficial Uses: AGR, GWR, REC1, REC2, WARM, WILD, RARE
- Hydrologic Unit: 801.21 AND 801.21
- Total Water Body Size: 18 and 19 miles
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Orange County Water District Data:*
 - Reach 3 – 0/6 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection 1-hr avg arsenic standard of 340 ug/L
 - Reach 3 – 0/6 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection 1-hr avg copper standard of 29-36 ug/L
 - Reach 3 – 0/1 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr) lead standard of 190 ug/L
 - Reach 3 – 0/6 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection 1-hr avg nickel standard of 934-1100 ug/L
 - Reach 3 – 0/1 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr) silver standard of 14 ug/L
 - Reach 3 - 0/1 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr) arsenic standard of 340 ug/L (1-hr avg)
 - Reach 3 - 0/1 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr) copper standard of 16 ug/L (1-hr avg)
 - Reach 3 - 0/1 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr) nickel standard of 559 ug/L (1-hr avg)
 - Reach 3 - 0/3 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr) arsenic standard of 340 ug/L (1-hr avg)
 - Reach 3 - 0/3 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr) copper standard of 28-33 ug/L (1-hr avg)

- Reach 3 - 0/3 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" nickel standard of 900-1100 ug/L (1-hr avg)
- Reach 3 - 0/1 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" selenium standard of 20 ug/L (1-hr avg)
- Reach 2 - 0/18 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection" arsenic standard of 340 ug/L (1-hr avg)
- Reach 2 - 0/19 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection" copper standard of 13-35 ug/L (1-hr avg)
- Reach 2 - 0/1 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" cyanide standard of 22 ug/L (1-hr avg)
- Reach 2 - 0/3 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" lead standard of 140-154 ug/L (1-hr avg)
- Reach 2 - 0/17 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection" nickel standard of 161-274 ug/L (1-hr avg)
- Reach 2 - 0/1 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" selenium standard of 20 ug/L (1-hr avg)
- Reach 2 - 0/1 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" zinc standard of 226 ug/L (1-hr avg)
- Reach 3 – 0/4 (1/yr) exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection 1-hr avg arsenic standard of 340 ug/L
- Reach 3 – 0/4 (1/yr) exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection 1-hr avg copper standard of 29-36 ug/L
- Reach 3 – 0/1 (1/yr) exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection 1-hr avg lead standard of 190 ug/L
- Reach 3 - 0/4 (1/yr) exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection 1-hr avg nickel standard of 935-1100 ug/L

Regional Board Compliance Monitoring Data:

- Reach 3 - 1/18 data points exceed the Basin Plan TDS objective of 700 mg/L
- Reach 3 - 1/55 data points exceed the Basin Plan Total Nitrogen objective of 10 mg/L

- Potential Sources: Unknown at this time
- Recommendation:
 - Delist for TDS and Total Nitrogen
 - More monitoring for other constituents due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
- TMDL Priority: None at this time
- TMDL Start Date: Not applicable at this time
- TMDL End Date: Not applicable at this time

7. Santa Ana River, Reach 4:

- Beneficial Uses: GWR, REC1, REC2, WARM, WILD
- Hydrologic Unit: 801.27
- Total Water Body Size: 12 miles
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Orange County Water District Data:*
 - 0/1 exceeded the “CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)” arsenic standard of 340 ug/L (1-hr avg)
 - 0/1 exceeded the “CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)” copper standard of 26 ug/L (1-hr avg)
 - 0/1 exceeded the “CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)” nickel standard of 834 ug/L (1-hr avg)
- Potential Sources: Unknown at this time
- Recommendation: More monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
- TMDL Priority: None at this time
- TMDL Start Date: Not applicable at this time
- TMDL End Date: Not applicable at this time

8. Santa Ana River, Reach 5:

- Beneficial Uses: MUN (applies upstream of Orange Ave (Redlands); downstream, water is exempted from MUN), AGR, GWR, REC1, REC2, WARM, WILD, RARE
- Hydrologic Unit: 801.52
- Total Water Body Size: 17 miles
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Orange County Water District Data:*
 - 0/3 exceeded the “CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)” copper standard of 13-28 ug/L (1-hr avg)
 - 0/1 exceeded the “CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)” lead standard of 130 ug/L (1-hr avg)
 - 0/1 exceeded the “CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)” nickel standard of 810 ug/L (1-hr avg)
- Potential Sources: Unknown at this time
- Recommendation: More monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
- TMDL Priority: None at this time
- TMDL Start Date: Not applicable at this time
- TMDL End Date: Not applicable at this time

9. Canyon Lake:

- Beneficial Uses: MUN, AGR, GWR, REC1, REC2, WARM, WILD
- Hydrologic Unit: 802.11
- Total Water Body Size: 600 acres
- Size Impaired: 52 acres
- Extent of Impairment: Unknown at this time
- Data Analyses: Independent study on East Bay indicates bottom depth rising rapidly due to sedimentation
- Potential Sources: urban runoff, non point source, agricultural runoff
- Recommendation: List East Bay of Canyon Lake on 303(d) list as impaired for REC 1, REC 2 and WARM beneficial uses
- TMDL Priority: Medium
- TMDL Start Date: 2008
- TMDL End Date: 2011

Mountain Area Water Bodies

1. San Jacinto River North Fork (Reach 7):

- Beneficial Uses: MUN, AGR, GWR, REC1, REC2, COLD, WILD
- Hydrologic Unit: 802.21
- Total Water Body Size:
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Lake Hemet Municipal Water District Data:*
 - 1/4 samples in one location exceeded the aluminum primary MCL (1000 ug/L) and secondary MCL (200 ug/L) for drinking water.
 - 0/4 exceeded the antimony primary MCL (6 ug/L) and no secondary MCL for drinking water
 - 0/4 exceeded the arsenic primary MCL (50 ug/L) for drinking water
 - 0/4 exceeded the barium primary MCL (1000 ug/L) for drinking water
 - 0/4 exceeded the beryllium primary MCL (4 ug/L) for drinking water
 - 0/4 exceeded the cadmium primary MCL (5 ug/L) for drinking water
 - 0/4 exceeded the iron secondary MCL (300 ug/L) for drinking water
 - 0/4 exceeded the Basin Plan Objective total hardness objective of 100 mg/L
 - 3/4 exceeded the Basin Plan Objective sodium objective of 10 mg/L
 - 0/4 exceeded the Basin Plan Objective sulfate objective of 20 mg/L
 - 0/4 exceeded the Basin Plan Objective chloride objective of 15 mg/L
 - 0/4 exceeded the Basin Plan Objective TDS objective of 150 mg/L

San Jacinto River South Fork (Reach 7):

Lake Hemet Water District Data:

- Reach 7 – 0/4 exceeded the primary (1000 ug/L) and secondary (200 ug/L) MCL DHS drinking water standards
- Reach 7 – 2/4 exceeded the Basin Plan Objective total hardness objective of 100 mg/L

- Reach 7 – 4/4 exceeded the Basin Plan Objective sodium objective of 10 mg/L
 - Reach 7 – 0/4 exceeded the Basin Plan Objective sulfate objective of 20 mg/L
 - Reach 7 – 3/4 exceeded the Basin Plan Objective chloride objective of 15 mg/L
 - Reach 7 – 4/4 exceeded the Basin Plan Objective TDS objective of 150 mg/L
-
- Potential Sources: Unknown at this time
 - Recommendation: More monitoring due to insufficient data points
 - TMDL Priority: None at this time
 - TMDL Start Date: Not applicable at this time
 - TMDL End Date: Not applicable at this time

2. Strawberry Creek:

- Beneficial Uses: MUN, AGR, GWR, REC1, REC2, COLD, WILD
- Hydrologic Unit: 802.21
- Total Water Body Size: 9 miles
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Lake Hemet Water District Data:*
 - 0/4 exceeded the Basin Plan Objective total hardness objective of 100 mg/L
 - 4/4 exceeded the Basin Plan Objective sodium objective of 10 mg/L
 - 0/4 exceeded the Basin Plan Objective sulfate objective of 20 mg/L
 - 3/4 exceeded the Basin Plan Objective chloride objective of 15 mg/L
 - 3/4 exceeded the Basin Plan Objective TDS objective of 150 mg/L
- Potential Sources: Unknown at this time
- Recommendation: More monitoring due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
- TMDL Priority: None at this time
- TMDL Start Date: Not applicable at this time
- TMDL End Date: Not applicable at this time

3. Big Bear Lake:

- Beneficial Uses: MUN, AGR, GWR, REC1, REC2, WARM, COLD, WILD, RARE
- Hydrologic Unit: 801.71
- Total Water Body Size: 2970 acres
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Big Bear Municipal Water District Data:*
 - Station 1 – 0/8 exceeded the Basin Plan Objective total phosphorus standard of 0.15 mg/L
 - Station 2 – 1/5 exceeded the Basin Plan Objective total phosphorus standard of 0.15 mg/L
 - Station 3 – 0/5 exceeded the Basin Plan Objective total phosphorus standard of 0.15 mg/L
 - Station 4 – 0/5 exceeded the Basin Plan Objective total phosphorus standard of 0.15 mg/L
 - Station 5 – 0/8 exceeded the Basin Plan Objective total phosphorus standard of 0.15 mg/L
 - Station 1 – 8/8 exceeded the Basin Plan Objective total nitrogen standard of 0.15 mg/L
 - Station 2 – 5/5 exceeded the Basin Plan Objective total nitrogen standard of 0.15 mg/L
 - Station 3 – 5/5 exceeded the Basin Plan Objective total nitrogen standard of 0.15 mg/L
 - Station 4 – 5/5 exceeded the Basin Plan Objective total nitrogen standard of 0.15 mg/L
 - Station 5 – 8/8 exceeded the Basin Plan Objective total nitrogen standard of 0.15 mg/L
- Recommendation: None, TMDL development in progress
- Potential Sources: Unknown at this time
- TMDL Priority: High
- TMDL Start Date: 2002
- TMDL End Date: 2005

4. Knickerbocker Creek:

- Beneficial Uses: MUN, GWR, REC1, REC2, COLD, WILD (all are intermittent beneficial uses)
- Hydrologic Unit: 801.71
- Total Water Body Size: 2 miles
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Big Bear Municipal Water District Data:*
 - 4/4 samples in one location exceeded Basin Plan TIN objective (for Big Bear Lake) of 0.15 mg/l
 - 1/4 exceeded the Basin Plan total phosphorus objective (for Big Bear Lake) of 0.15 mg/L
 - 4/4 exceeded the Basin Plan objective (for Big Bear Lake) of total nitrogen standard of 0.15 mg/L
- Potential Sources: Unknown at this time
- Recommendation: add to 303(d) list for nitrogen; TMDL for Big Bear Lake and tributaries underway
- TMDL Priority: high
- TMDL Start Date: 2002
- TMDL End Date: 2005

5. Metcalfe Creek:

- Beneficial Uses: MUN, GWR, REC1, REC2, COLD, WILD, SPWN
- Hydrologic Unit: 801.71
- Total Water Body Size: 2 miles
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Big Bear Municipal Water District Data:*
 - 4/4 exceeded the Basin Plan TIN objective (for Big Bear Lake) of 0.15 mg/l
 - 0/4 exceeded the Basin Plan total phosphorus objective (for Big Bear Lake) of 0.15 mg/L
 - 4/4 exceeded the Basin Plan TIN objective (for Big Bear Lake) of 0.15 mg/l
- Potential Sources: Unknown at this time
- Recommendation: add to 303(d) list for nitrogen; TMDL for Big Bear Lake and tributaries underway
- TMDL Priority: high
- TMDL Start Date: 2002
- TMDL End Date: 2005

6. Boulder Creek:

- Beneficial Uses: MUN, GWR, REC1, REC2, COLD, WILD, SPWN
- Hydrologic Unit: 801.71
- Total Water Body Size: 2 miles
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Big Bear Municipal Water District Data:*
 - 4/4 exceeded the Basin Plan TIN objective (for Big Bear Lake) of 0.15 mg/l
 - 0/4 exceeded the Basin Plan Objective total phosphorus (for Big Bear Lake) of 0.15 mg/L
 - 4/4 exceeded the Basin Plan TIN Objective (for Big Bear Lake) of 0.15 mg/L
- Potential Sources: Unknown at this time
- Recommendation: add to 303(d) list for nitrogen; TMDL for Big Bear Lake and tributaries underway
- TMDL Priority: high
- TMDL Start Date: 2002
- TMDL End Date: 2005

7. Grout Creek:

- Beneficial Uses: MUN, GWR, REC1, REC2, COLD, WILD, SPWN
- Hydrologic Unit: 801.71
- Total Water Body Size: 2 miles
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Big Bear Municipal Water District Data:*
 - 1/2 samples exceeded the Basin Plan TIN objective (for Big Bear Lake) of 0.15 mg/l
 - 0/2 exceeded the Basin Plan total phosphorus objective (for Big Bear Lake) of 0.15 mg/L
 - 1/2 exceeded the Basin Plan TIN objective (for Big Bear Lake) of 0.15 mg/L
- Potential Sources: Unknown at this time
- Recommendation: already on 303(d) list as impaired for nutrients; TMDL development underway
- TMDL Priority: high
- TMDL Start Date: 2002
- TMDL End Date: 2005

8. Rathbun Creek:

- Beneficial Uses: MUN, GWR, REC1, REC2, COLD, WILD
- Hydrologic Unit: 801.71
- Total Water Body Size: 2 miles
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:
 - Big Bear Municipal Water District Data:*
 - 0/5 exceeded the Basin Plan TIN objective (for Big Bear Lake) of 0.15 mg/L
 - 2/2 exceeded the Basin Plan TIN objective (for Big Bear Lake) of 0.15 mg/L
 - 0/2 exceeded the Basin Plan total phosphorus objective of 0.15 mg/L
 - 2/2 exceeded the Basin Plan TIN objective (for Big Bear Lake) of 0.15 mg/L
- Recommendation: already on 303(d) list as impaired for nutrients; TMDL development underway
- TMDL Priority: high
- TMDL Start Date: 2002
- TMDL End Date: 2005

List of Abbreviations/Acronyms

Ag	Silver
Hg	Mercury
Cu	Copper
Ni	Nickel
Cd	Cadmium
Cr	Chromium
TDS	Total dissolved solids
TIN	Total inorganic nitrogen
TN	Total nitrogen
Zn	Zinc
MCL	Maximum contaminant level
MTRL	Maximum Tissue Residence Level
DHS	CA Department of Health Services
NAS	National Academy of Science
FDA	Food and Drug Administration
EBE	Enclosed Bays and Estuaries (Cal Toxics Rule)
CTR	California Toxics Rule
REC1	Water contact recreation beneficial use
REC2	Non-water contact recreation beneficial use
MUN	Municipal drinking water supply beneficial use
IND	Industrial service supply beneficial use
PROC	Industrial process supply beneficial use
GWR	Groundwater recharge
COMM	Commercial and sport fishing beneficial use
NAV	Navigation beneficial use
BIOL	Biological habitat beneficial use
RARE	Habitat for rare or endangered species (beneficial use)
WILD	Wildlife habitat beneficial use
EST	Estuarine habitat beneficial use
SPWN	Spawning, reproduction, development habitat beneficial use
SHEL	Shellfish harvesting beneficial use
MAR	Marine aquatic habitat beneficial use
WARM	Warm water aquatic habitat beneficial use
LWRM	Limited warm water aquatic habitat beneficial use
COLD	Cold water aquatic habitat beneficial use